

REPLY

The Official Action indicates that the drawings are objected to as failing to comply with 37 C.F.R. § 1.84(p)(5) for failing to include several reference numerals. In response, applicant has amended the drawings to incorporate the reference numerals recited in paragraph 1 of the Official Action. The changes to the drawings are shown in red ink in the attached drawing sheets. Applicant respectfully requests that the Examiner approve the amendments to the drawings. No new matter has been added to the application.

Applicant has also amended the Abstract as suggested in the Official Action. A clean version of the Abstract is attached hereto as a separate sheet.

Claims 1-30 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As discussed below, applicant has amended the claims to address the informalities recited in the Official Action.

In claim 1, line 17, and in claim 23, line 4, the Official Action indicates that the phrase “constructed and arranged” is indefinite. While applicant believes that the phrase “constructed and arranged” satisfies the requirements of 35 U.S.C. § 112, applicant has amended claim 23 by deleting the phrase “constructed and arranged” and substituting therefore the word “which”.

In claim 1, line 27, the Official Action states that the word “generally” is not a positive recitation and renders the claim indefinite. In response, while applicant believes that the term “generally” as used in claim 1 satisfies 35 U.S.C. § 112, applicant has amended claim 1 by deleting the words “generally vertically”.

With respect to claim 1, line 27, the Official Action inquires what applicant means by the phrase “oriented generally, vertically downwardly.” In response, applicant refers the Examiner to Figs. 1, 2, and 8 which show the pipette connector parked in the gun holster with the pipette connector oriented generally, vertically downwardly. As described above, applicant has deleted the words “generally vertically” from the claim.

In claim 6, line 2, the Official Action recites that the limitation “said attaching means” lacks antecedent basis. In response, claim 6 has been amended by substituting the term “fastening means” for the term “attaching means”. Antecedent basis for the term “fastening means” can be found in claim 1 on page 18, line 2.

In claims 11-13 and 25-27, the Official Action indicates that the limitations “DS1”, “the prongs DP1”, “the first fork”, “the socket DS2”, “the prongs DP2”, “DC1, DC2, and the second fork” lack antecedent basis. The Official Action further states that it is not clear as to what DS1, DS2, DP1, DP2, DC1, DC2 are referring to. In response, while applicant believes that claims 11-13 and 25-27 satisfy the requirements of 35 U.S.C. § 112, applicant has amended claim 11 and 26 to emphasize that the designations

DS1, DS2, DP1, DP2, DC1 and DC2 are merely grammatical appositives used similarly to reference numerals to identify the dimensions recited immediately prior the respective designation. For example, in claim 11 the diameter of the socket of the first fork is designated DS1. The diameter of the of the socket of the second fork is designated DS2.

By way of additional response, applicant notes that the limitations “the first fork” and “the second fork” do not lack antecedent basis since such limitations are inherent to the structure which is recited in claim 7 as including “a pair of forks”. Since the apparatus recited in claim 7 has “a pair of forks”, the apparatus inherently has a first fork and a second fork.

Applicant also notes that the limitations DS1, DS2, DP1, DP2, DC1, and DC2 are the same numerals referred to in paragraph 1 of the Official Action and which are now identified in the drawings. Therefore, applicant believes that claims 11-13 and 25-27 are not indefinite under 35 U.S.C. § 112.

In claim 18, line 2, the Official Action recites that the limitation “said external air pressure source” lacks antecedent basis. In response, claim 18 has been amended by substituting the word “remote” for the word “external”. Antecedent basis for the term “remote air pressure source” can be found in claim 1 on page 17, line 6.

Claims 1-15, 22, and 28-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kenney, U.S. Patent No. 5,090,255 in view of Columbus, U.S. Patent No. 4,437,586. Claims 18-21 are rejected under 35

U.S.C. § 103(a) as being unpatentable over Kenney in view of Columbus, as applied to claim 1 above, and further in view of Nycum, U.S. Patent No. 4,066,234. In response, applicant has amended independent claims 1, 22 to further distinguish applicant's claimed invention from the aforementioned references.

Independent claims 1, 22 and 29 have been amended to further distinguish the references disclosed in the Official Action, in particular Kenney and Columbus. Independent claims 1, 22, and 29 are not taught, disclosed or suggested by the combination of Kenney and Columbus.

Claim 1 now recites:

...said bracket including a socket having an open top, an open bottom, and a slit extending lengthwise from the top of the socket to the bottom of the socket,

said slit having a width which is smaller than the diameter of said socket and said pipette connector but larger than the diameter of a standard laboratory pipette connected to said pipette connector,

said socket removably holding said gun with said pipette connector oriented downwardly by passing the pipette through the slot and inserting said pipette connector into said socket through the top.

Neither Kenney or Columbus teach, disclose or suggest the above-cited claim language.

Referring to Fig. 1 of Columbus, the notch 50 (identified as a socket in the Official action), does not have a slit which is "smaller than the diameter of said socket and said pipette connector" as recited in claims 1, 22 and 29. Because the notch 50 in Columbus does not have a "slit having a

width which is smaller than the diameter of said socket and said pipette connector” as recited in claims 1, 22 and 29, a pipette gun parked in the notch of Columbus would fall out because the weight of the gun handle will rotate the gun out of the notch 50. In order to prevent the gun from falling out of the socket, applicant’s claimed invention provides a slit which is large enough for the pipette to be passed through the slit but small enough that the connector of the pipette gun can not pass through the slit. Therefore, the combination of Kenney and Columbus would not produce an apparatus which functions in the same way as applicant’s claimed invention or which achieves the same result as applicant’s claimed invention. Accordingly, the Section 103 rejection of independent claims 1 and 22 is improper and should be withdrawn.

Claims 2-14 and 18-21 are dependent on claim 1 and are believed to be patentable for at least the same reasons as discussed above with respect to claim 1. Claims 23-28 are dependent on claim 22 and are believed to be patentable for at least the same reasons as discussed above with respect to claim 22. Claim 30 is dependent on claim 29 and is believed to be patentable for at least the same reasons as discussed above with respect to claim 29.

Claims 31-34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kenney in view of Nycum, U.S. Patent No. 4,066,234. Applicant respectfully traverse this rejection since Nycum does not teach, disclose, or suggest “means on the bottom side of said base layer for

fastening said pad to either a horizontal or vertical surface” as recited in claim 31, or “means on the top side of said base for removably fastening the pump to said pad” as recited in claim 31. Therefore, the rejection under 35 U.S.C. § 103(a) is improper and should be withdrawn.

Applicant notes the appreciation the indication that claims 16-17, 23-27 and 30 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 set forth above. In response, applicant has rewritten claims 15-17 as claims 35-37, has rewritten claims 23-27 as claims 38-42, and has rewritten claim 30 as claim 43. Claims 35-43 has been rewritten to overcome the above-discussed section 112 rejections and are believed to be allowable.

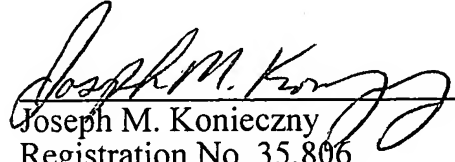
In view of the above-amendments and remarks, applicant believes that the claims define a new, useful and nonobvious invention. Accordingly, an early notice of allowance is respectfully requested.

If necessary, an appropriate extension of time to respond is respectfully requested.

Attorney Docket No.: E-1901

The Commissioner is authorized to charge any additional fees which may be required to Patent Office Deposit Account No. 05-0208.

Respectfully submitted,
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Clean Version of Abstract

A pipette gun and holster apparatus having a remote source of positive and negative air pressure. The holster supports the pipette gun above a work table with the pipette connector oriented generally, vertically downwardly.

The holster has a base which may be fastened to a vertical wall. A mounting bracket is fixed to and extends transverse to the base. The bracket has a bottomless socket constructed and arranged to receive and removably hold the pipette gun by inserting the pipette connector into the socket.

A switch is located proximate the socket. The first switch regulates the flow of power to the air source. The switch deactivates the air source when the pipette gun is parked in the holster and energizes the air source when the pipette gun is removed from the holster.

A method of metering fluid using a pipette gun. The holster is removable fastened to a vertical surface next to or proximate a horizontal work table top. The pipette gun is parked in the holster above the work table with the said pipette connector and pipette oriented generally, vertically downwardly out of contact with the table top. The pipette gun is removed from the holster and fluid is metered with the gun. The external air pressure source is automatically inactivated when the pipette gun is parked in the holster and automatically activated when the pipette gun is removed from the holster.

Clean Version of Claims

1. A pipette gun and holster apparatus having a remote source of positive and negative air pressure, said apparatus comprising:

a) a pipette gun having an external, flexible conduit connecting said gun to said remote air pressure source, said gun including:

i) a housing having a hand grip portion and a barrel portion oriented transverse to said hand grip portion;

ii) a pipette connector fixed to and oriented transverse to said barrel portion;

iii) an internal conduit connected to said external flexible conduit and said pipette connector;

iv) a valve intermediate said internal conduit which selectively regulates the flow of either positive air pressure or negative air pressure through said internal conduit to said pipette connector;

v) a positive air flow trigger and a negative air flow trigger connected to said valve;

b) a gun holster which supports said gun above a work table with said pipette connector oriented downwardly, said holster including:

i) a base;

ii) means for fastening said base to a vertical wall;

iii) a mounting bracket fixed to and extending transverse to said base, said bracket including a socket having an open top,

an open bottom, and a slit extending lengthwise from the top of the socket to the bottom of the socket,

said slit having a width which is smaller than the diameter of said socket and said pipette connector but larger than the diameter of a standard laboratory pipette connected to said pipette connector,

said socket removably holding said gun with said pipette connector oriented downwardly by passing the pipette through the slit and inserting said pipette connector into said socket through the top.

6. The apparatus recited in claim 1, said fastening means comprising suction cups, velcro tabs, or magnets.

8. The apparatus recited in claim 7, said socket being circular and being formed in between the base end of at least one of said forks and the end of the prongs of said at least one fork.

9. The apparatus recited in claim 8, said socket having a diameter DS larger than the distance DP between the prongs of said at least one fork.

11. The apparatus recited in claim 9, wherein the diameter DS1 of the socket and the distance DP1 between the prongs of the first fork is

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greater than the diameter DS2 of the socket and the distance DP2 between the prongs of the second fork, respectively.

15. ~~The apparatus recited in claim 1, including a first switch proximate said socket, said switch regulating the flow of power to said remote air source when said gun is parked in said holster.~~

16. The apparatus recited in claim 15, said first switch deactivating said remote air source when said gun is parked in said holster, and said first switch energizing said remote air source when said gun is removed from said holster.

18. The apparatus recited in claim 1, including a mounting pad for said remote air pressure source.

22. A holster for supporting a pipette gun on a vertical surface above or proximate a table top, said pipette gun having a negative and positive air pressure source, pipette connector and a pipette attached to said connector, said holster comprising:

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- a) a base;
 - b) means for fastening said base to a vertical wall;
 - c) a mounting bracket fixed to and extending transverse to said base, said bracket including a socket having an open top, an open

bottom, and a slit extending lengthwise from the top of the socket to the bottom of the socket,

said slit having a width which is smaller than the diameter of said socket and said pipette connector but larger than the diameter of a standard laboratory pipette connected to said pipette connector,

said socket removably holding said gun with said pipette connector oriented downwardly by passing the pipette through the slit and inserting said pipette connector into said socket through the top.

23. The holster recited in claim 22, including a first switch proximate said socket, said first switch regulating the flow of power to said air source, said first switch deactivating said air source when the pipette gun is parked in said holster and energizing said air source when the pipette gun is removed from said holster.

24. The holster recited in claim 23, said mounting bracket comprising a pair of forks having a base end and a plurality of prongs, the base end of said forks being fixed to said holster base at vertically-spaced locations, said socket being circular and being formed in between the base end of at least one of said forks and the end of the prongs of said at least one fork.

25. The apparatus recited in claim 24, said socket having a diameter DS larger than the distance DP between the prongs of said at least one fork, said pipette connector having a maximum outer diameter DC less than DS but greater than DP.

26. The apparatus recited in claim 24, wherein the diameter DS1 of the socket and the distance DP1 between the prongs of the first fork is greater than the diameter DS2 of the socket and the distance DP2 between the prongs of the second fork, respectively.

29. A method of metering fluid using a pipette gun, comprising the steps of:

a) providing a pipette gun having a remote air pressure source and holster assembly, said holster having a base, means for fastening said base to a vertical surface, a mounting bracket fixed to and extending transverse to said base, said bracket including a socket having an open top, an open bottom, and a slit extending lengthwise from the top of the socket to the bottom of the socket,

said slit having a width which is smaller than the diameter of said socket and said pipette connector but larger than the diameter of a standard laboratory pipette connected to said pipette connector,

said socket removably holding said gun with said pipette connector oriented downwardly by passing the pipette through the slit and inserting

said pipette connector into said socket through the top;

- b) removably fastening said holster to a vertical surface next to or proximate a horizontal work table top;
- c) parking the pipette gun in the holster above the work table with said pipette connector and pipette oriented downwardly out of contact with the table top;
- d) removing said pipette gun from said holster and metering fluid with said gun.

35. A pipette gun and holster apparatus having a remote source of positive and negative air pressure, said apparatus comprising:

- a) a pipette gun having an external, flexible conduit connecting said gun to said remote air pressure source, said gun including:
 - i) a housing having a hand grip portion and a barrel portion oriented transverse to said hand grip portion;
 - ii) a pipette connector fixed to and oriented transverse to said barrel portion;
 - iii) an internal conduit connected to said external flexible conduit and said pipette connector;
 - iv) a valve intermediate said internal conduit constructed and arranged to selectively regulate the flow of either positive air pressure or negative air pressure through said internal conduit to said pipette connector;

- v) a positive air flow trigger and a negative air flow trigger connected to said valve;
- b) a gun holster constructed and arranged to support said gun above a work table with said pipette connector oriented generally, vertically downwardly, said holster including:
- i) a base;
 - ii) means for fastening said base to a vertical wall;
 - iii) a mounting bracket fixed to and extending transverse to said base, said bracket having a bottomless socket constructed and arranged to receive and removably hold said gun by inserting said pipette connector into said socket, including a first switch proximate said socket, said switch regulating the flow of power to said remote air source when said gun is parked in said holster.

36. The apparatus recited in claim 35, said first switch deactivating said remote air source when said gun is parked in said holster, and said first switch energizing said remote air source when said gun is removed from said holster.

37. The apparatus recited in claim 35, including a second switch which deactivates said remote air source independent of said first switch.

38. A holster for supporting a pipette gun on a vertical surface above or proximate a table top, said pipette gun having a negative and positive air pressure source, pipette connector and a pipette attached to said connector, said holster comprising:

- a) a base;
- b) means for fastening said base to a vertical wall;
- c) a mounting bracket fixed to and extending transverse to said base, said bracket having a bottomless socket constructed and arranged to receive and removably hold said gun by inserting said pipette connector into said socket, wherein said holster supports said gun above a work table with said pipette connector oriented generally, vertically downwardly, including a first switch proximate said socket, said first switch regulating the flow of power to said air source, said first switch deactivating said air source when the pipette gun is parked in said holster and energizing said air source when the pipette gun is removed from said holster.

39. The holster recited in claim 38, said mounting bracket comprising a pair of forks having a base end and a plurality of prongs, the base end of said forks being fixed to said holster base at vertically-spaced locations, said socket being circular and being formed in between the prongs of each of said forks.

40. The apparatus recited in claim 39, said socket having a diameter DS larger than the distance DP between the prongs of said forks, said pipette connector having a maximum outer diameter DC less than DS but greater than DP.

41. The apparatus recited in claim 39, wherein the diameter DS1 of the socket and the distance DP1 between the prongs of the first fork is greater than the diameter DS2 of the socket and the distance DP2 between the prongs of the second fork, respectively.

42. The apparatus recited in claim 41, said pipette connector having a frusto-conical shape, a maximum outer diameter DC1 greater than DP1, DP2 and DS2 but less than DS1, and a minimum outer diameter DC2 greater than DP2 but less than DS1, DP1 and DS2.

43. A method of metering fluid using a pipette gun, comprising the steps of:

a) providing a pipette gun having a remote air pressure source and holster assembly, said holster having a base, means for fastening said base to a vertical, a mounting bracket fixed to and extending transverse to said base, said bracket having a bottomless socket;

b) removably fastening said holster to a vertical surface next to or proximate a horizontal work table top;

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- c) parking the pipette gun in the holster above the work table with said pipette connector and pipette oriented [generally, vertically] downwardly out of contact with the table top;
 - d) removing said pipette gun from said holster and metering fluid with said gun; and
 - e) automatically inactivating said external air pressure source when said pipette gun is parked in said holster and automatically activating said external air pressure source when said pipette gun is removed from said holster.